TABLE 1.—*Solar radiation intensities during February, 1926*—Con.

MADISON, WIS.

Date	Sun's zenith distance: 8 a.m.	78.7°	75.7°	70.7°	60.0°	0.0°	60.0°	70.7°	75.7°	78.7°	Noon
	75th mer. time	Air mass: A. M.					P. M.				Local mean solar time
	c.	5.0	4.0	3.0	2.0	*1.0	2.0	3.0	4.0	5.0	c.
	mm.	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*mm.*
Feb. 15	1.32	1.04	1.15	1.29		1.60					1.68
19	1.19		1.11	1.27	1.46	1.67					1.52
23	1.96	0.71	0.78								3.00
26	2.26				1.38						2.16
27	1.32	1.07	1.17	1.28	1.44	1.60					1.78
Means		**0.94**	**1.05**	**1.28**	**1.43**	**1.62**					
Departures		**±0.00**	**−0.06**	**+0.04**	**+0.06**						

LINCOLN, NEBR.

Feb. 6	4.17			1.25	1.41						5.16
7	3.99						1.41	1.30			6.02
9	3.81	1.09	1.21	1.34		1.62	1.46	1.31	1.19	1.07	3.99
12	4.57	0.90	1.02	1.17	1.34	1.54	1.32	1.20	1.06	0.93	6.27
15	1.96	0.72	0.93	1.10	1.22		1.39	1.14	1.10	0.96	2.74
22	3.15						1.28	1.14	1.00	0.84	3.81
23	3.81			1.09	1.30						3.81
27	3.63				1.23						4.37
28	3.99			1.14	1.30						4.95
Means		**0.90**	**1.05**	**1.18**	**1.30**	**1.58**	**1.37**	**1.22**	**1.09**	**0.95**	
Departures		**−0.05**	**+0.01**	**−0.02**	**−0.08**		**+0.02**	**+0.05**	**+0.06**	**+0.04**	

*Extrapolated.

TABLE 2.—*Solar and sky radiation received on a horizontal surface*

[Gram-calories per square centimeter of horizontal surface]

Week beginning—	Average daily radiation: Washington	Madison	Lincoln	Chicago	New York	Average daly departure from normal: Washington	Madison	Lincoln
1926	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*	*cal.*
January 29	120	104	145	44	66	−78	−96	−100
February 5	159	163	251	48	132	−57	−54	−16
12	218	176	263	54	104	−16	−63	−31
19	241	196	266	83	108	−17	−63	−53
Deficiency since first of year on Feb. 25						−1,190	−2,212	−2,191

551.506 (261.1)

WEATHER OF NORTH AMERICA AND ADJACENT OCEANS

NORTH ATLANTIC OCEAN

By F. A. YOUNG

February was another unusually stormy month over the North Atlantic. The percentage of days with gales was considerably above the normal over the middle and western sections of the steamer lanes, where they were reported on from 7 to 9 days, the storm area on a number of days extending as far south as the 35th parallel. The conditions over the eastern section of the northern steamer lanes were moderate as compared with the two previous months, although that region was by no means free from heavy weather. A number of reports were received from vessels indicating winds of force 11 and 12, although they were not quite as common as in January, and the number of marine casualties was also less.

TABLE 1.—*Averages, departures, and extremes of atmospheric pressures at sea level, 8 a. m. (75th meridian), North Atlantic Ocean, February, 1926*

Stations	Average pressure	Departure[1]	Highest	Date	Lowest	Date
	Inches	*Inch*	*Inches*		*Inches*	
St. Johns, Newfoundland	29.47	−0.35	30.10	15th	28.64	12th.
Nantucket	29.79	−0.27	30.28	17th	29.16	[2] 4th.
Hatteras	29.97	−0.16	30.46	17th	29.54	10th.
Key West	30.09	+0.01	30.30	28th	29.84	10th.
New Orleans	30.08	−0.02	30.36	20th	29.82	[2] 14th.
Swan Island	29.94	−0.05	30.06	20th	29.86	[2] 10th.
Turks Island	30.08	0.00	30.16	[2] 6th	29.94	11th.
Bermuda	30.06	−0.08	30.46	18th	29.50	11th.
Horta, Azores	30.04	−0.09	30.56	28th	29.42	4th.
Lerwick, Shetland Islands	29.71	−0.01	30.23	28th	29.02	17th.
Valencia, Ireland	29.66	−0.24	30.66	28th	28.97	1st.
London	29.87	−0.13	30.58	28th	29.27	3d.

[1] From normals shown on H. O. Pilot Chart, based on observations at Greenwich mean noon, or 7 a. m., 75th meridian.
[2] And on other dates.

Fog was unusually prevalent off the New England coast and in the Gulf of Mexico, while the number of days on which it occurred was about normal in the vicinity of the British Isles, and somewhat below over the Grand Banks and steamer lanes.

Low pressure prevailed at practically all of the stations during the greater part of the month, although at Horta there were two short periods in the second and third decades, respectively, when the barometric readings were considerably above normal, indicating that the North Atlantic HIGH was well developed.

Charts VIII to XIII show the conditions from the 1st to 6th, inclusive. During the first part of this period the same disturbance shown on Charts X and XI for January covered the eastern section of the steamer lanes. The LOW that was central near St. Johns, Newfoundland, on the 6th, as shown on Chart XIII, moved steadily eastward, and on the 7th the center was near 45° N., 40° W., and moderate to strong gales prevailed over the region between the 35th and 50th parallels and the 35th and 50th meridians. The LOW that was off the coast of Ireland on the 6th moved but little, decreasing in intensity, as on the 7th moderate weather prevailed over the eastern section of the steamer lanes, although on that date and the 8th vessels between the Azores and the Spanish coast reported moderate southwesterly gales.

On the 8th there was a slight depression off Hatteras that afterward developed into a severe disturbance. On that date there was also a LOW central near 50° N., 40° W., and strong gales swept the steamer lanes between the 30th and 50th meridians. The Hatteras disturbance moved northeastward along the coast, and on the 10th was near Nantucket. On the 11th it was near Halifax, while on both of these dates southwesterly to north-

westerly gales occurred between the 65th meridian and the American coast, and on the 11th storm logs were also rendered by vessels in the vicinity of the Bermudas.

On the 12th the coast disturbance was central near St. Johns, with westerly gales west of the 35th meridian, extending as far south as the 30th parallel. On the 13th the center of this LOW was near 50° N., 40° W., and the storm area covered the greater part of the ocean between the Azores and the Bermudas, extending over the eastern section as far north as the 50th parallel.

On the 14th there was a slight depression off the Virginia Capes that increased in intensity as it moved northeastward. On the 15th the center was near Nantucket, and on that date moderate westerly gales prevailed along the coast between Hatteras and Nova Scotia, while southerly winds of gale force were reported by vessels as far east as the 50th meridian. On the 14th and 15th strong westerly to southwesterly gales were also encountered over the eastern section of the steamer lanes.

On the 16th St. Johns was again near the center of a LOW, with gales in the southern and eastern quadrants, the storm area extending to the 30th parallel and 35th meridian, respectively, while moderate weather was the rule over the remainder of the ocean. This LOW moved but little during the next 24 hours, and on the 17th was still central near St. Johns, and strong westerly gales prevailed between the Bermudas and the 45th parallel, while conditions over the eastern section of the steamer lanes differed but little from those of the previous day.

On the 18th the St. Johns disturbance was central near 47° N., 42° W., and the storm area covered the region between the 35th and 50th parallels and the 40th and 55th meridians, and storm reports were received from a few vessels in the vicinity of the Azores and the eastern section of the steamer lanes.

The daily weather map of the 19th shows a LOW central near Washington, D. C., and on that date southerly gales were reported along the American coast south of the Virginia Capes, and westerly gales in the Gulf of Mexico. On this date the northern LOW was central near 48° N., 35° W., and the storm area extended from the 35th to 50th parallels, east of the 45th meridian.

On the 20th Belle Isle was near the center of an active disturbance, and strong gales prevailed over the region west of the 40th meridian, extending as far south as the 30th parallel. The northern LOW of the 18th and 19th was now central near 45° N., 20° W., and while a few storm reports were received from vessels in the eastern section of the steamer lanes, favorable weather was the rule in that region.

The Belle Isle LOW moved steadily eastward, and on the 21st was over the central section of the steamer lanes. The storm area over the western section of the ocean had contracted considerably since the previous day, and moderate weather was the rule west of the 60th meridian.

On the 22d areas of low pressure surrounded both Belle Isle and Nantucket, and moderate westerly gales occurred off the American coast between Hatteras and the Virginia Capes, while the steamer lanes between the 30th and 60th meridians were swept by westerly winds that at times reached hurricane force.

By the 23d the two LOWS had apparently joined forces, and the combined LOW was now central near 50° N., 40° W. The weather had moderated considerably, as the storm area covered only a comparatively small part of the middle section of the steamer lanes. This LOW moved steadily northeastward, and on the 24th was undoubtedly in the vicinity of Iceland, although it was impossible to locate its position accurately due to lack of observations. On this date vessels near 55° N., 25° W., encountered southwesterly winds of force 11 and 12, although the storm area had contracted since the previous day.

The weather map of the 25th shows a deep depression central over lower Lake Michigan, with a barometer reading of 28.90 inches at Milwaukee. The influence of this LOW extended to the Atlantic coast, where southerly winds of gale force prevailed between Norfolk and Charleston. On this date, conditions over the eastern section of the ocean had moderated since the previous day, although winds of moderate gale force were reported east of the 30th meridian, as well as from land stations on the British Isles.

On the 26th Eastport, Maine, was the center of a depression, and strong southerly gales were encountered between the 55th meridian and the American coast, while moderate weather prevailed over the remainder of the ocean. This LOW moved northeastward, and on the 27th was near Belle Isle, with southerly gales between the 40th and 55th parallels and 35th and 50th meridians. It moved but little during the next 24 hours, and the weather conditions had not changed materially, although on the 28th the storm area was of somewhat greater extent than on the previous day, and moderate northwesterly gales were reported from vessels between the Bermudas and the American coast. On the 28th there was an area of unusually high pressure near 47° N., 15° W., with a crest of over 30.70 inches.